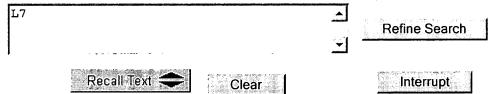
## **Refine Search**

## Search Results -

Terms						
tiotropium same (HFA or HFC or hydrofluorocarbon or hydrofluoroalkane)	27					

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:



## **Search History**

DATE: Thursday, September 28, 2006 Purge Queries Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=P	GPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD; PLUR=YES; OP=OR		
<u>L7</u>	tiotropium same (HFA or HFC or hydrofluorocarbon or hydrofluoroalkane)	27	<u>L7</u>
DB=P			
<u>L6</u>	Christel near Schmelzer	18	<u>L6</u>
<u>L5</u>	L4 and tiotropium	2	<u>L5</u>
<u>L4</u>	Friedrich near Schmidt	96	<u>L4</u>
<u>L3</u>	Christel near Schmelzer	18	<u>L3</u>
<u>L2</u>	sabine near six	1	<u>L2</u>
DB=U	SPT; PLUR=YES; OP=OR		
<u>L1</u>	6045778.pn.	1	<u>L1</u>

**END OF SEARCH HISTORY** 

## (FILE 'HOME' ENTERED AT 12:04:00 ON 28 SEP 2006)

	FILE 'CAPLUS, MEDLINE, USPATFU	ULL' ENTERED AT 12:04:23 ON 28 SEP 2006
L1	1262 S TIOTROPIUM	
L2	28 S L1 (P) (HFA OR HE	FC OR HYDROFLUOROCARBON OR HYDROFLUOROALKANE)
L3	18 S L2 (P) ACID	
L4	17 DUPLICATE REMOVE L3	3 (1 DUPLICATE REMOVED)
L5	17 FOCUS L4 1-	

L5 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

TI Tiotropium containing HFC solution formulations

AB This invention relates to tiotropium containing stable pharmaceutical solution formulations suitable for aerosol administration. More particularly, this invention relates to tiotropium containing stable pharmaceutical solution formulations suitable for aerosol administration wherein either an inorg. acid or an organic acid is added to the aerosol solution formulation which contains a tiotropium salt, preferably tiotropium bromide in solution with an environmentally safe hydrofluorocarbon (HFC) as a propellant, together with an organic compound as a cosolvent. The acid provides stability against degradation or decomposition of the medicament resulting largely from interaction of the medicament with the cosolvent and/or water present in the solution formulation. A formulation contained tiotropium bromide monohydrate, absolute ethanol, water, citric acid, and HFC-134a.

ACCESSION NUMBER: 2004:531359 CAPLUS

DOCUMENT NUMBER: 141:76765

TITLE: Tiotropium containing HFC solution formulations
INVENTOR(S): Six, Sabine; Schmelzer, Christel; Schmidt, Friedrich
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma GmbH & Co. Kg, Germany

SOURCE: PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.												DATE						
– W							WO 2003-EP13692					20031204						
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		CN,	CO,	CR,	CU,	CZ,	DE,	ŅΚ,	DM,	DZ,	EC,	ĒΕ,	EG,	ES,	FI,	GB,	GD,	
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		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NI,	NO,	
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	
		TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VC,	VN,	ΥU,	ZA,	ZM,	zw		
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		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
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С	CN 1726038		Α	20060125			CN 2003-80106366					5 20031204						
J	JP 2006510680		<b>T</b> 2	20060330			JP 2004-559752					20031204						
U	US 2005058606		A1	20050317		US 2003-730796					20031209							
PRIORI	PRIORITY APPLN. INFO.:							EP 2	002-	2823	8		A 2	0021	216			
										US 2	003-	4466	72P		P 2	0030	211	
										WO 2	003-	EP13	692	•	₩ 2	0031	204	
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RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Tiotropium containing HFC solution formulations

AB This invention relates to tiotropium containing stable pharmaceutical solution formulations suitable for aerosol administration. More particularly, this invention relates to tiotropium containing stable pharmaceutical solution formulations suitable for aerosol administration wherein either an

L5 ANSWER 2 OF 17 USPATFULL on STN

inorganic acid or an organic acid is added to the

aerosol solution formulation which contains a tiotropium salt, preferably tiotropium bromide in solution with an

environmentally safe hydrofluorocarbon (HFC) as a

propellant, together with an organic compound as a cosolvent. The acid provides stability against degradation or decomposition of

the medicament resulting largely from interaction of the medicament with the cosolvent and/or water present in the solution formulation.

ACCESSION NUMBER: 2005:68468 USPATFULL

TITLE: Tiotropium containing HFC solution formulations INVENTOR(S): Six, Sabine, Wiesbaden, GERMANY, FEDERAL REPUBLIC OF

Schmelzer, Christel, Ingelheim, GERMANY, FEDERAL

REPUBLIC OF

Schmidt, Friedrich, Ingelheim, GERMANY, FEDERAL

REPUBLIC OF

Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim, PATENT ASSIGNEE(S):

GERMANY, FEDERAL REPUBLIC OF, 55216 (non-U.S.

corporation)

KIND DATE NUMBER ------US 2005058606 A1 20050317 US 2003-730796 A1 20031209 (10) PATENT INFORMATION: APPLICATION INFO.:

> NUMBER DATE \_\_\_\_\_\_

PRIORITY INFORMATION: EP 2002-28238 20021216 US 2003-446672P 20030211 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MICHAEL P. MORRIS, BOEHRINGER INGELHEIM CORPORATION,

900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT,

06877-0368

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1 LINE COUNT: 514

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 12 OF 17 USPATFULL on STN

ΤI Novel crystalline anhydrate with anticholinergic efficacy

AB The invention relates to a new crystalline anhydrate of tiotropium bromide, processes for preparing it and its use for preparing a pharmaceutical composition for the treatment of respiratory complaints, particularly for the treatment of COPD (chronic obstructive pulmonary

disease) and asthma.

2005:165985 USPATFULL ACCESSION NUMBER:

TITLE: Novel crystalline anhydrate with anticholinergic

efficacy

Pfrengle, Waldemar, Biberach, GERMANY, FEDERAL REPUBLIC INVENTOR(S):

Sieger, Peter, Mittelbiberach, GERMANY, FEDERAL

REPUBLIC OF

PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Ingelheim,

GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

KIND DATE NUMBER \_\_\_\_\_\_ PATENT INFORMATION:

US 2005143410 A1 20050630 US 2004-976624 A1 20041029 (10) APPLICATION INFO.:

> DATE NUMBER -----

PRIORITY INFORMATION: EP 2003-25077 20031103

US 2003-528338P 20031210 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

MICHAEL P. MORRIS, BOEHRINGER INGELHEIM CORPORATION,

900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT,

06877-0368, US

NUMBER OF CLAIMS:

10 1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

2 Drawing Page(s)

LINE COUNT:

687

CAS INDEXING IS AVAILABLE FOR THIS PATENT.